

REMARKS

The present Amendment is in response to the Examiner's Office Action mailed January 12, 2005. Claims 8, 10, 14-16, and 46 are cancelled, claims 1, 12, 23, 37, 41, 48 are amended, and new claim 60 is added. Claims 1-7, 9, 11-13, 19-45, 47-57 and 60 are now pending in view of the above amendments.

Reconsideration of the application is respectfully requested in view of the above amendments to the claims and the following remarks. For the Examiner's convenience and reference, Applicant's remarks are presented in the order in which the corresponding issues were raised in the Office Action.

Please note that the following remarks are not intended to be an exhaustive enumeration of the distinctions between any cited references and the claimed invention. Rather, the distinctions identified and discussed below are presented solely by way of example to illustrate some of the differences between the claimed invention and the cited references. In addition, Applicants request that the Examiner carefully review any references discussed below to ensure that Applicants' understanding and discussion of the references, if any, is consistent with the Examiner's understanding.

II. Double Patenting Rejection

In the Office Action, the Examiner rejects claims 8, 10, 14, 16 and 46 under 37 CFR 1.75 as being substantially duplicative of claims 6, 9, 15 and 45. Claims, 8, 10, 14, 16 and 46 have now been cancelled rendering this rejection moot.

III. PRIOR ART REJECTIONS

A. Rejection Under 35 U.S.C. § 103

The Examiner rejects claims 1, 3-4, 15-16, 21, 27-28, 33-34, 37, 39, 45-46 and 48 under 35 U.S.C. § 103 as being unpatentable over *Dapkus* (U.S. Patent No. 6,621,842) in view of *Nagarajan et al.* (U.S. Patent No. 5,760,939).

Applicant traverses the Examiner's rejection for obviousness on the grounds that the references – either individually or in combination – fail to teach or suggest each and every element of the rejected claims. In particular, each of independent claims 1, 37, and 48 now recite confining layers comprising GaAsP. By contrast to the presently claimed invention, *Dapkus* and *Nagarajan* do not teach or suggest the use of confining layers comprising GaAsP as is presently claimed. Accordingly, Applicants submit that independent claims 1, 37, and 48 are not obviated by the cited references. Claims 3-4, 15-16, 21, 27-28, 33-34, 39, and 45-46 depend for one of claims 1, 37, and 48 and are therefore patentable over the cited references for at least the same reasons as the parent claims. Applicants therefore respectfully request that this rejection be withdrawn.

The Examiner rejects claims 2, 5, 20, 24, 29-30, 35-36, 38, 42, 53 and 56 under 35 U.S.C. § 103 as being unpatentable over *Dapkus* in view of *Nagarajan* and further in view of *Thornton* (U.S. Patent No. 6,002,705). The Examiner also rejects claims 6-8, 13-14, 19, 22, 25-26, 31-32, 43-44, 47, 49, 51-52, 54-55 and 57 under 35 U.S.C. § 103 as being unpatentable over *Dapkus* in view of *Nagarajan et al.* and further in view of *Jewell et al.* (U.S. Patent No. 6,359,920). The Examiner further rejects claims 9-11, 40 and 50 under 35 U.S.C. § 103 as being unpatentable over *Dapkus* in view of *Nagarajan* and further in view of *Shimizu et al.* (US2002/0034203).

Each of the foregoing rejected claims depend from at least one of claims 1, 37, and 48, which are patentable over *Dapkus* and *Nagarajan* for the reasons cited above. *Thornton*, *Jewell*, and *Shimizu* cannot cure the deficiencies of *Dapkus* and *Nagarajan*, and for at least these reasons Applicant respectfully submits that each of the pending claims are patentable over the cited

references. Applicants therefore respectfully request that the rejections under 35 U.S.C. § 103 be withdrawn.

IV. Allowed Subject Matter

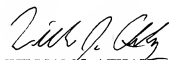
The Examiner has indicated that claims 12, 23 and 41 would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Applicants respectfully thank the Examiner for this indication. However, Applicants now respectfully submit that each of the pending claims is now patentable over the cited references in view of the above comments.

CONCLUSION

In view of the foregoing, Applicants believe the claims as amended are in allowable form. In the event that the Examiner finds remaining impediment to a prompt allowance of this application that may be clarified through a telephone interview, or which may be overcome by an Examiner's Amendment, the Examiner is requested to contact the undersigned attorney.

Dated this 13th day of June, 2005.

Respectfully submitted,



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